

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

United States Patent and Trademark
Office
(Box PCT)
Crystal Plaza 2
Washington, DC 20231
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing (day/month/year)
08 April 1997 (08.04.97)

International application No.
PCT/US96/13070

Applicant's or agent's file reference
HOY-00152/03

International filing date (day/month/year)
06 August 1996 (06.08.96)

Priority date (day/month/year)
07 August 1995 (07.08.95)

Applicant

HOY, Stephen, B.

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:
14 February 1997 (14.02.97)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was

☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO
34, chemin des Colonnnettes
1211 Geneva 20, Switzerland

Facsimile No.: (41-22) 740.14.35

Authorized officer

B. Fitzgerald

Telephone No.: (41-22) 730.91.11



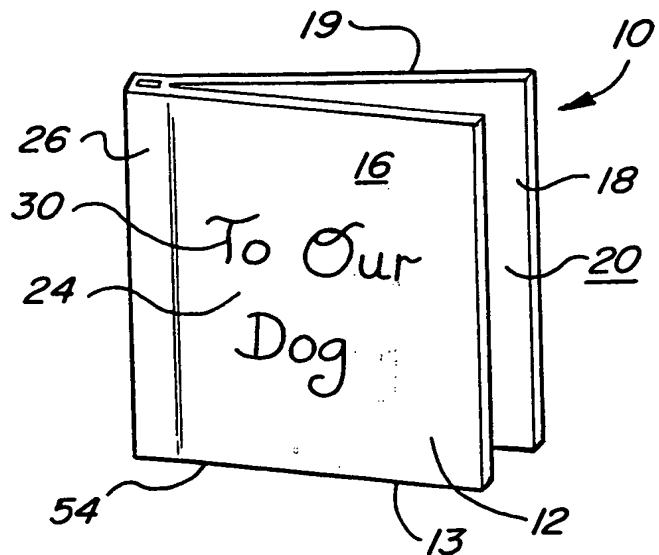
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification ⁶ : A23K 1/00</p>	<p>A1</p>	<p>(11) International Publication Number: WO 97/05786 (43) International Publication Date: 20 February 1997 (20.02.97)</p>
<p>(21) International Application Number: PCT/US96/13070 (22) International Filing Date: 6 August 1996 (06.08.96) (30) Priority Data: 60/001,957 7 August 1995 (07.08.95) US (71)(72) Applicant and Inventor: HOY, Stephen, B. [US/US]; 26575 Oakland Street, Roseville, MI 48066 (US). (74) Agents: KLEMBUS, Nancy, M. et al.; Suite 400, 280 N. Woodward Avenue, Birmingham, MI 48009 (US).</p>		<p>(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, <u>RO</u>, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, <u>(US)</u>, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).</p> <p>Published <i>With international search report.</i></p>

(54) Title: EDIBLE ANIMAL GREETING CARDS

(57) Abstract

The present invention is directed to an edible greeting card (10) suitable for ingestion by a pet which comprises at least one substantially rigid edible panel (12) having at least one message region (24) positioned on the front surface and/or back surface of the panel. At least one edible message (30) is provided within the message region and, in a preferred embodiment, a plurality of messages are provided on the edible panels of the greeting card. The edible message has a plurality of characters, each character being sufficiently large so as to be perceived by the average human. In embodiments utilizing two or more panels (12, 18) edible joining devices (26) are utilized to join the panels. The panels are positioned within the vicinity of the pet so that the pet may view and ingest the panels and edible message.



FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AM	Armenia	GB	United Kingdom	MW	Malawi
AT	Austria	GE	Georgia	MX	Mexico
AU	Australia	GN	Guinea	NE	Niger
BB	Barbados	GR	Greece	NL	Netherlands
BE	Belgium	HU	Hungary	NO	Norway
BF	Burkina Faso	IE	Ireland	NZ	New Zealand
BG	Bulgaria	IT	Italy	PL	Poland
BJ	Benin	JP	Japan	PT	Portugal
BR	Brazil	KE	Kenya	RO	Romania
BY	Belarus	KG	Kyrgyzstan	RU	Russian Federation
CA	Canada	KP	Democratic People's Republic of Korea	SD	Sudan
CF	Central African Republic	KR	Republic of Korea	SE	Sweden
CG	Congo	KZ	Kazakhstan	SG	Singapore
CH	Switzerland	LI	Liechtenstein	SI	Slovenia
CI	Côte d'Ivoire	LK	Sri Lanka	SK	Slovakia
CM	Cameroon	LR	Liberia	SN	Senegal
CN	China	LT	Lithuania	SZ	Swaziland
CS	Czechoslovakia	LU	Luxembourg	TD	Chad
CZ	Czech Republic	LV	Latvia	TG	Togo
DE	Germany	MC	Monaco	TJ	Tajikistan
DK	Denmark	MD	Republic of Moldova	TT	Trinidad and Tobago
EE	Estonia	MG	Madagascar	UA	Ukraine
ES	Spain	ML	Mali	UG	Uganda
FI	Finland	MN	Mongolia	US	United States of America
FR	France	MR	Mauritania	UZ	Uzbekistan
GA	Gabon			VN	Viet Nam

its protective pocket within the non-edible greeting card prior to ingestion by the pet.

U.S. Patent No. 5,284,365 to Stuart discloses a greeting card assembly having a removable insert containing a message. The message insert, once
5 removed from the greeting card, may be kept as an ornament such as a Christmas tree ornament or other similar decorative item.

U.S. Patent No. 3,589,047 to Hess discloses a novelty greeting card comprising a substantially three-dimensional caricature which is collapsible onto a base sheet. The caricature is inflated by blowing air into the caricature through
10 a hole in the base sheet, thus providing a three-dimensional gift in a substantially flat greeting card.

U.S. Patent No. 5,133,496 to Davidson et al. discloses a combination greeting card and gift pouch. A single sheet is tri-folded into a closed pouch, with adhesive provided along the margins of the sheet, thereby enabling the pouch to be
15 sealed and mailed as a greeting card.

U.S. Patent No. 3,548,527 to Acosta et al. discloses a card having a pivotable rear panel whereby a photograph or other picture may be placed within the card to attractively mount the photo or picture.

Several U.S. patents disclose items which are ingestible by animals, such
20 as U.S. Patent No. 4,681,758 to Fruthaler et al., which discloses shaped, flavored articles which are attractive to masticating animals and have the texture, appearance and aroma of natural food materials. U.S. Patent No. 4,265,916 to Skoch discloses an animal feed supplement in block form. U.S. Patent No. 4,777,058 to

EDIBLE ANIMAL GREETING CARDS**Cross-Reference to Prior Applications**

This application claims the benefit of U.S. Provisional Application No. 60/001,957 filed August 7, 1995.

5

Field of the Invention

The present invention relates generally to novelty items for animals, and more particularly to an edible greeting card for pets.

Background of the Invention

Many families have pets which are increasingly treated as members of the family. Many pet owners enjoy including their beloved pets in holiday festivities such as birthdays, Christmas, Easter, Valentine's Day, Thanksgiving, and Halloween. As greeting cards are traditionally given to loved ones on such holidays, many pet owners give greeting cards to their pets or send greeting cards from themselves or their pets to the pets of relatives and close friends. Pets do not appreciate the significance of a typical greeting card and do not get any enjoyment out of receiving such a card. The present invention solves the problem of typical greeting cards by providing an edible greeting card which provides enjoyment to the pet as well as the pet owner and sender of the card.

A variety of patents disclose greeting cards which include gifts or where the card itself may be construed as a gift. U.S. Patent No. 4,203,516 to Stonoga et al. discloses a novelty greeting card wherein a dog biscuit is contained within a non-edible greeting card particularly configured to hold the dog biscuit. The greeting card disclosed by Stonoga et al. requires the pet owner to remove the pet treat from

In embodiments utilizing two or more panels, edible joining means are provided so that one edible panel may be joined to another edible panel, creating a joined structure which may stand upright on a horizontal surface. In a preferred embodiment of the present invention, a flexible rawhide strip is threaded through
5 holes placed proximate to the perimeter of the edible panels. Alternate embodiments may utilize an edible adhesive or flexible edible hinge. Other alternate embodiments of the invention may be constructed of a single member having an indented, perforated or thinner hinge area positioned between two panel areas so that the single member may be folded along the flexible hinge.

10 The panels are positioned within the vicinity of the pet so that the pet may view and ingest the panels and edible message. In a preferred embodiment of the present invention, at least one supporting section is positioned along and attached to the perimeter of at least one edible panel. Thus, the joined edible panels are supportable upon at least one supporting section on a horizontal surface so that the
15 center of gravity of the joined panels is positioned above the horizontal surface. In a preferred embodiment of the present invention, the supporting section has a thickness which is equal to or greater than the thickness of the substantially rigid edible panel to which it is attached.

In alternate embodiments, the greeting card may be suspended from a cage
20 rail by a hook, wire or placed in a holder.

In an alternate embodiment of the present invention, a single rigid edible panel suitable for ingestion by a pet is provided, having at least one message region positioned on the front and/or back surface of the rigid edible panel and at least one

Chandler discloses a composite animal food having a crunchy shell surrounding a deformable core of edible protein and water soluble solids.

While the prior art provides many varieties of animal foods and greeting cards, the prior art does not address the inherent need of pet owners to demonstrate
5 their affection to their pets in a manner similar to that by which they demonstrate their affection to other humans.

There remains a need for a greeting card which the giver, pet owner and pet may enjoy, and the present invention is directed to resolving that need.

Summary of the Invention

10 The present invention solves the problem of prior art greeting cards and pet novelty articles in that the giver, pet owner and pet receive enjoyment from the giving and receiving of the edible greeting card.

An edible greeting card suitable for ingestion by a pet such as a horse, dog, cat, rabbit or bird comprises at least one substantially rigid edible panel having a
15 thickness, a perimeter, and front and back surfaces. At least one message region is located on the front surface and/or back surface of the substantially rigid edible panel and is positioned within the perimeter of the substantially rigid edible panel.

At least one edible message is provided within at least one message region and, in a preferred embodiment, a plurality of messages are provided on the edible
20 panels of the greeting card. The edible message has a plurality of characters, each character being sufficiently large so as to be perceived by the average human. The message regions are configured so as to permit the placement thereupon of at least one edible message, and in the preferred embodiment, the message region is flat.

edible message relating to the pet positioned within the message region. The rigid edible panel is positioned in the vicinity of the pet so that the pet may ingest the panel and edible message in a manner similar to the multiple-panel greeting card. In a preferred embodiment of the present invention, a wire is provided, the central
5 portion of the wire enclosed in the edible panel such that the ends of the wire extend exteriorly of the edible panel. The wire ends are attachable to one or more rigid projecting members in the vicinity of the pet.

Other objects, advantages and applications of the present invention will be made clear by the following detailed description of a preferred embodiment of the
10 invention. The description makes reference to drawings in which:

Brief Description of the Drawings

Figure 1 is a perspective view of a preferred embodiment of the present invention;

Figure 2 is a view of an alternate embodiment of the present invention;

15 Figure 3 is a view of an embodiment of the present invention having a single panel;

Figure 4A is a view of an alternate embodiment of the present invention having a cutout;

Figure 4B is the rear view of the embodiment depicted in Figure 4A;

20 Figure 5A is a view of another alternate embodiment of the present invention;

Figure 5B is a view of the interior surfaces of the embodiment of the invention depicted in Figure 5A;

Figure 6A is a view of an alternate embodiment of the present invention in a disassembled state;

Figure 6B is a view of the embodiment of Figure 6A properly assembled;

Figure 7A is a view of an alternate embodiment of the present invention;

5 Figure 7B is a view of the interior surfaces of the embodiment depicted in Figure 7A;

Figure 8 is a view of an alternate embodiment of the present invention wherein three edible rigid panels are utilized;

Figure 9 is a view of an alternate embodiment of the present invention
10 which utilizes three rigid edible panels;

Figure 10A is a view of another alternate embodiment of the present invention;

Figure 10B is side view of the embodiment depicted in Figure 10A;

Figure 11A is a view of an alternate embodiment of the present invention
15 wherein a panel has a contoured exterior surface;

Figure 11B is a view of an interior surface of the embodiment depicted in Figure 11A;

Figure 12A is a view of an alternate embodiment of the present invention having a cutout; and

20 Figure 12B is a view of an interior surface of the embodiment depicted in Figure 12A.

Detailed Description

such as molasses or corn syrup may be used as an edible adhesive, permitting the flexible edible hinge to be "glued" to the rigid edible panel.

In a preferred embodiment of the invention depicted in Figure 1, first edible panel 12, edible hinge 26, and second edible panel 18 are formed from a single continuous material, such as a sheet of rawhide. Hinge 26 preferably has a thinner cross-section than edible panels 12 and 18, giving edible hinge 26 increased flexibility while maintaining sufficient rigidity in edible panels 12 and 18.

In an alternate embodiment of the invention, such as depicted in Figures 7A and 7B, panels 12 and 18 may be formed from a single continuous section of material made primarily from grains. An indentation or perforation is formed in the continuous section of material between panels 12 and 18, forming their perimeters and hinge 26. The continuous material is then bent along the indentation, thus forming the card as depicted in Figures 7A and 7B.

In an alternate embodiment depicted in Figure 2, panels 12 and 18 include a plurality of holes 29 positioned near perimeters 13 and 19. An edible strip 28, preferably rawhide or other flexible edible material, is threaded through holes 29, thus joining edible panels 12 and 18.

Each greeting card 10 has at least one message region 24 positioned on at least one surface of at least one panel. An edible message 30 containing a plurality of characters such as letters, numbers, graphics, symbols or marks, may be placed within message region 24. The characters of message 30 must be large enough to permit visual recognition of the characters by a human without assistance. Stated otherwise, message 30 must be large enough so that the characters of the message

The present invention is directed to an edible greeting card suitable for ingestion by a pet, whereby the giving of such a greeting card allows a person to express their affection for the pet while at the same time providing a healthy and enjoyable snack for the pet. In relation to the present invention, "edible" is defined
5 as being readily consumed and digested by vertebrates. While many substances are ingestible by pets, the present invention is intended to provide a healthy and tasty snack for the pet while providing enjoyment to the giver of the greeting card.

The invention, shown generally at 10 in Figure 1, includes a first edible panel 12 and a second edible panel 18, first panel 12 having a perimeter 13,
10 interior surface 14 (see Figure 5B), exterior surface 16, and a second panel 18 having a perimeter 19, interior surface 20 and exterior surface 22 (see Figure 4B). In the preferred embodiments, the panels are generally rectangular and flat, but may alternately have curved panels which enable a pet to grasp and play with the panels as they are ingesting the greeting card.

15 Edible panels 12 and 18 may be joined by a variety of means to form a rigid edible greeting card which may be opened to view the interior surfaces 14 and 20 of panels 12 and 18, respectively. As shown in the embodiment depicted in Figures 5A and 5B, the perimeter 19 of second edible panel 18 is attached to perimeter 13 of first edible panel 12 via flexible edible hinge 26. In a preferred
20 embodiment, hinge 26, comprised of rawhide, has a portion of its perimeter embedded in panels 12 and 18 which are, prior to solidification or hardening of panels 12 and 18, comprised primarily of grains. Alternately, a sticky substance

the bottom of a cage, a floor or card holder. As depicted in the embodiment of Figure 3, supporting section 54 is preferably thicker than panel 12, thus assisting greeting card 10 to remain in an upright, erect position on the horizontal surface.

Alternate embodiments may utilize a wire 60 embedded into edible panel 12, allowing wire ends 62 to be wrapped around a rigid projecting member such as a cage bar or hook, thereby suspending greeting card 10 in the vicinity of the pet. The wire 60 may be provided as the sole means for placing the greeting card in the vicinity of the pet, or may be used in conjunction with supporting section 54. A supporting section 54 is preferably utilized for greeting cards ingested by horses, dogs and cats, while a wire 60 is preferably utilized for greeting cards ingested by birds or small mammals such as gerbils, hamsters and rabbits.

The greeting card 10 may be suspended from the area within which the pet is kept such as a cage or stall, by mechanisms such as a clip having its free ends embedded in the panel, or a hook constructed of the edible materials which comprise the panel and which is formed integrally with the panel. Alternatively, a holder may be attached to the side of the cage or stall and the greeting card placed within the holder, the card resting on its supporting section.

The perimeters 13 and 19 of the edible panels may be variously configured so as to provide a visually pleasing greeting card. As depicted in Figure 4A, first panel 12 is configured so that a portion of first panel 12 projects above second panel 18. As shown in Figure 4B, the extending portion of Figure 12 may be mirrored in a cutout 56 of panel 18. The perimeters and thickness of panels 12 and 18 may be configured so as to enhance the ability of the pet to ingest the greeting

are discernable by the human eye. Accordingly, message region 24 must be large enough so as to permit the placement thereupon of a message 30.

The edible message preferably is an edible ink having ingredients selected from the group including corn syrup and glycerine. Nontoxic coloring agents such as FD&C certified colors and other ancillary ingredients such as catnip may be included in the edible ink. A variety of printing techniques may be used to apply the characters of the edible message to the rigid edible panels, including silk screening, lithography, laser imprinting and embossing. In selected embodiments such as those utilizing panels of rawhide, the message may be hot stamped into the rawhide utilizing a process similar to that used for imprinting leather goods.

In alternate embodiments, the edible message may be formed of gum paste or other edible food decoration which may then be placed in the message region of the edible panel. Edible food decorations typically comprises ingredients including corn starch, corn syrup, sugar and glycerine. Gum paste typically comprises ingredients including gelatin, gum tragacanth, shortening and glucose.

Alternate embodiments may first place the edible message on an edible decal, sticker, rice paper or wafer paper which is then applied to the message regions of the panels.

Greeting card 10 is positioned in the vicinity of the pet so that at least one message 30 is visible to the pet and the pet may ingest the card. In the embodiments depicted in Figures 1-4, a supporting section 54 is positioned along and attached to perimeters 13 and 19 of edible panels 12 and 18, thus permitting greeting card 10 to be set on a horizontal surface in the vicinity of the pet, such as

As shown in Figure 11A, cutouts 58 may be formed in first panel 12, enabling a viewer to see the interior surface 20 of second panel 18, shown in Figure 11B. In the embodiment shown in Figure 12A, first panel 12 may be sufficiently thick so as to enable a pattern having a depth to be integrally formed
5 into first panel 12. The heart-shaped depression 64 may additionally be utilized as a message region 24. Depressions having a variety of shapes may be utilized, such as rectangles, ovals, and other geometric shapes.

An alternate embodiment of the invention, shown in Figures 6A and 6B, may include additional panels such as fourth panel 40, fifth panel 41, sixth panel
10 42, seventh panel 43 and eighth panel 44. The embodiment depicted in Figure 6A is the unassembled version of the greeting card 10, the various panels including tabs 46 and slots 48 which permit assembly of the various panels into the greeting card depicted in Figure 6B.

While selected embodiments of the edible panels of the present invention
15 may be constructed of a single substance such as rawhide, alternate embodiments of the panels may be constructed from a variety of ingredients such as grains, minerals and seeds. The ingredients of the panels described herein will vary depending on the animal for which the greeting card is intended. The panels may include ancillary ingredients such as binding agents, vitamins, flavorings and colors
20 to enhance the manufacturability, rigidity, palatability and nutritional value of the greeting card.

A preferred group of ingredients for edible panels are grains, wherein the ingredients for an edible panel include a member of the group consisting of corn,

card 10. As shown in Figures 5A and 5B, messages 30 may be displayed in message region 24 on the interior surfaces 14 and 20 of panels 12 and 18.

As depicted in Figures 7A and 7B, some of the message regions 24 provided on greeting card 10 may be left blank so that the giver of the greeting card 10 may
5 personalize the card. A marker 32 is provided which contains edible ink having ingredients selected from the group including corn syrup and glycerine. Nontoxic coloring agents such as FD&C certified colors and other ancillary ingredients such as catnip may be included in the edible ink. Marker 32 has a tip 33 configured to apply a line of edible ink onto message regions 24.

10 Figure 8 shows an alternate embodiment of the present invention wherein a third panel 34 is utilized in conjunction with first panel 12 and second panel 18, the panels being joined to create a tri-fold greeting card having messages 30 displayed thereupon.

An alternate embodiment of the present invention shown in Figure 9 utilizes
15 a third panel 34 to provide additional stability between first panel 12 and second panel 18, enabling greeting card 10 to stand upright on a horizontal surface. As shown in Figure 9, supporting sections 54 are positioned along perimeter 13 of first panel 12, perimeter 35 of third panel 34, and perimeter 19 of second panel 18.

The embodiments depicted in Figures 10A and 10B utilize second panel 18
20 primarily as a support for first panel 12. In this embodiment, message regions 24 are preferably only placed on panel 12. In the embodiment depicted in Figures 10A and 10B, a tab and slot arrangement may be utilized to attach first panel 12 and second panel 18.

millet, alfalfa and combinations thereof. In an alternate embodiment, the panels include a mineral selected from the group consisting of calcium, salt, magnesium, ferrous carbonate, zinc oxide and combinations thereof. In a preferred embodiment, the edible panel includes calcium sulfate and salt.

5 If the greeting card is intended for ingestion by a feline, the edible panels preferably include a grain selected from the group consisting of corn, wheat, rice and combinations thereof. In a preferred embodiment, ground yellow corn is utilized as an ingredient of the edible panel. Additives such as poultry by-products, fish meal, catnip and fish oil may be included in the edible panels. In an alternate
10 embodiment, catnip is provided in a liquid or flake form which may be applied to the greeting card by the pet owner.

 If the recipient of the greeting card is canine, rawhide is a preferred choice for the panels of the greeting card of the present invention. Alternate embodiments of greeting cards suitable for ingestion by dogs includes an ingredient selected from
15 the group consisting of corn, wheat, rice and combinations thereof. Alternate embodiments of the greeting cards may include ingredients which are particularly chosen to meet the special dietary needs of selected groups of dogs, such as dogs having food allergies and weight problems. For example, a greeting card having lamb and rice as the primary ingredients are suitable for dogs having food allergies.

20 The thickness of the edible greeting card 10 will vary depending upon the materials used to construct the edible panels 12 and 18 and the type of animal to which the greeting card is being sent. The panels 12 and 18 must be sufficiently thin to allow the receiving pet to bite and chew the greeting card. In a greeting

oats, alfalfa, wheat, soy and combinations thereof. The form of the grain, such as rolled, crimped, ground, dehydrated or milled, will vary depending on the animal for which the greeting card is intended and the requirements of the process by which the greeting card is manufactured. An alternate group of ingredients for
5 edible panels are based upon minerals wherein the ingredients for an edible panel include a member from the group consisting of calcium, limestone, salt and combinations thereof.

If the greeting card is intended for ingestion by a horse, the ingredients of the substantially rigid edible panels will preferably include a member of the group
10 consisting of oats, corn, wheat, soy, alfalfa or combinations thereof. In a preferred embodiment, rolled or crimped oats are included. The panels may additionally include a binding agent such as molasses, and vitamin additives and minerals such as salt or ground limestone may be added to enhance the nutritional value or palatability of the edible greeting card.

15 Greeting cards intended for small mammals such as rabbits, hamsters, gerbils, and guinea pigs preferably include an ingredient which is a member of the group consisting of alfalfa, corn, rice and combinations thereof. Preferably, the grain utilized is dehydrated, milled or flaked. In a preferred embodiment, the edible panels will include flaked corn. Vegetables such as dehydrated carrots and
20 seeds such as safflower seeds or milo seeds are preferably included as additives in the edible panels for small mammals.

For greeting cards suitable for ingestion by birds, the edible panels preferably include an ingredient which is a member of the group consisting of corn,

Claims

1 1. An edible greeting card suitable for ingestion by a pet comprising:
2 a substantially rigid edible panel suitable for ingestion by a pet, the
3 substantially rigid edible panel having a thickness, a perimeter, a front surface and
4 a back surface;
5 at least one message region being positioned on the front surface and/or
6 back surface of the substantially rigid edible panel and within the perimeter of the
7 substantially rigid edible panel;
8 at least one edible message suitable for ingestion by the pet, the edible
9 message having a plurality of characters, each character being sufficiently large so
10 as to be perceived visually by humans without assistance, the message region being
11 configured so as to permit the placement thereupon of the characters of the edible
12 message;
13 means for positioning the substantially rigid edible panel in the vicinity of
14 the pet so that the pet may ingest the substantially rigid edible panel and edible
15 message,
16 whereby at least one edible message is visible from the point of view of the
17 pet.

1 2. The edible greeting card as claimed in claim 1, wherein the edible
2 message is directed to the pet.

card for a dog, a preferred thickness is 0.25 inches, the thickness of such a card ranging between 0.125 inches for smaller dogs weighing under 20 pounds and 0.50 inches for larger dogs weighing over 65 pounds. For very large dog breeds weighing over 100 pounds, a thickness of greater than 0.50 inches may be
5 preferred.

The thickness of edible panels utilized in greeting cards for felines preferably range between 0.125 and 0.25 inches thick. Edible greeting cards for birds preferably have thicknesses of approximately 0.25 inches for panels constructed of seeds and the like, while panel thicknesses of up to 1 inch or more
10 may be acceptable for greeting cards constructed of minerals such as calcium sulfate. Greeting cards directed to horses are preferably constructed of panels having thicknesses of one inch and above.

Having described the various embodiments of the present invention with reference to the accompanying figures, it will be appreciated that various changes
15 and modifications can be made without departing from the scope or spirit of the invention.

1 7. The edible pet greeting card as claimed in claim 1, wherein the
2 substantially rigid edible panel includes wheat.

1 8. The edible pet greeting card as claimed in claim 1, wherein the
2 substantially rigid edible panel includes corn.

1 9. The edible pet greeting card as claimed in claim 1, wherein the
2 substantially rigid edible panel includes dehydrated carrots.

1 10. The edible greeting card as claimed in claim 1, wherein the
2 substantially rigid edible panel includes oats and molasses.

1 11. An edible greeting card suitable for ingestion by a pet comprising:
2 a substantially rigid edible panel suitable for ingestion by a pet, the
3 substantially rigid edible panel having a thickness, a perimeter, a front surface and
4 a back surface;

5 at least one message region being positioned on the front surface and/or
6 back surface of the substantially rigid edible panel and within the perimeter of the
7 substantially rigid edible panel;

8 means for creating an edible message suitable for ingestion by the pet, the
9 edible message having a plurality of characters, each character being sufficiently
10 large so as to be perceived visually by humans without assistance, the message

1 3. The edible greeting card as claimed in claim 1, wherein the means
2 for positioning the substantially rigid edible panel in the vicinity of the pet
3 comprises a wire having two ends, the wire enclosed in a portion of the
4 substantially rigid edible panel, the ends of the wire extending exteriorly of the
5 substantially rigid edible panel so that the wire may be attached to at least one
6 substantially rigid projecting member in the vicinity of the pet, at least one edible
7 message being visibly displayed thereupon.

1 4. The edible greeting card as claimed in claim 1, wherein the means
2 for positioning the substantially rigid edible panel in the vicinity of the pet
3 comprises a supporting section positioned along the perimeter of the substantially
4 rigid edible panel, the supporting section having a thickness equal to or greater than
5 the thickness of the substantially rigid edible panel, the substantially rigid edible
6 panel being supportable upon at least one supporting section on a substantially
7 horizontal surface, at least one edible message being visibly displayed thereupon.

1 5. The edible greeting card as claimed in claim 1, wherein the
2 substantially rigid edible panel includes calcium sulfate.

1 6. An edible greeting card as claimed in claim 1, wherein the
2 substantially rigid edible panel includes alfalfa.

1 15. The edible greeting card as claimed in claim 11, wherein the means
2 for positioning the substantially rigid edible panel in the vicinity of the pet
3 comprises at least one supporting section positioned along and attached to the
4 perimeter of the substantially rigid edible panel, the substantially rigid edible panel
5 being supportable upon at least one supporting section on a substantially horizontal
6 surface so that the center of gravity of the substantially rigid edible panel is
7 positioned above the horizontal surface, at least one edible message being visibly
8 displayed thereupon.

1 16. The edible greeting card as claimed in claim 11, wherein the
2 substantially rigid edible panel includes calcium sulfate.

1 17. The edible greeting card as claimed in claim 11, wherein the
2 substantially rigid edible panel includes corn.

1 18. An edible greeting card suitable for ingestion by a pet comprising:
2 at least two substantially rigid edible panels, each panel suitable for
3 ingestion by a pet and having a thickness, a perimeter, a front surface and a back
4 surface;
5 at least one message region being positioned on the front surface and/or
6 back surface of at least one substantially rigid edible panel and within the perimeter
7 the substantially rigid edible panel;

11 region being configured so as to permit the placement thereupon of the characters
12 of the edible message;

13 means for positioning the substantially rigid edible panel in the vicinity of
14 the pet so that the pet may ingest the substantially rigid edible panel;

15 whereby at least one edible message is visible from the point of view of the
16 pet.

1 12. The edible greeting card as claimed in claim 11, wherein the edible
2 message is directed to the pet.

1 13. The edible greeting card as claimed in claim 11, the means for
2 creating an edible message relating to a pet comprising a marker containing a
3 quantity of edible ink sufficient to create an edible message.

1 14. The edible greeting card as claimed in claim 11, wherein the means
2 for positioning the substantially rigid edible panel in the vicinity of the pet
3 comprises a wire having two ends, the wire enclosed in a portion of the
4 substantially rigid edible panel and the ends of the wire extending exteriorly of the
5 substantially rigid edible panel sufficiently so that the wire may be attached to at
6 least one substantially rigid projecting member in the vicinity of the pet, at least
7 one edible message being visibly displayed thereupon.

4 perimeter of at least one substantially rigid edible panel, the joined substantially
5 rigid edible panels being supportable upon at least one supporting section on a
6 substantially horizontal surface so that the center of gravity of the joined
7 substantially rigid edible panels is positioned above the horizontal surface.

1 21. The edible greeting card as claimed in claim 19, the supporting
2 section having a thickness equal to or greater than the thickness of the substantially
3 rigid edible panel to which it is attached.

1 22. The edible greeting card as claimed in claim 18, wherein the
2 substantially rigid edible panel includes rawhide.

1 23. The edible greeting card as claimed in claim 18, wherein the
2 substantially rigid edible panel includes calcium sulfate.

1 24. The edible greeting card as claimed in claim 18, wherein at least one
2 edible message is positioned on edible film, the edible film being placed on the
3 message region.

1 25. The edible greeting card as claimed in claim 18, wherein the
2 substantially rigid edible panel includes oats.

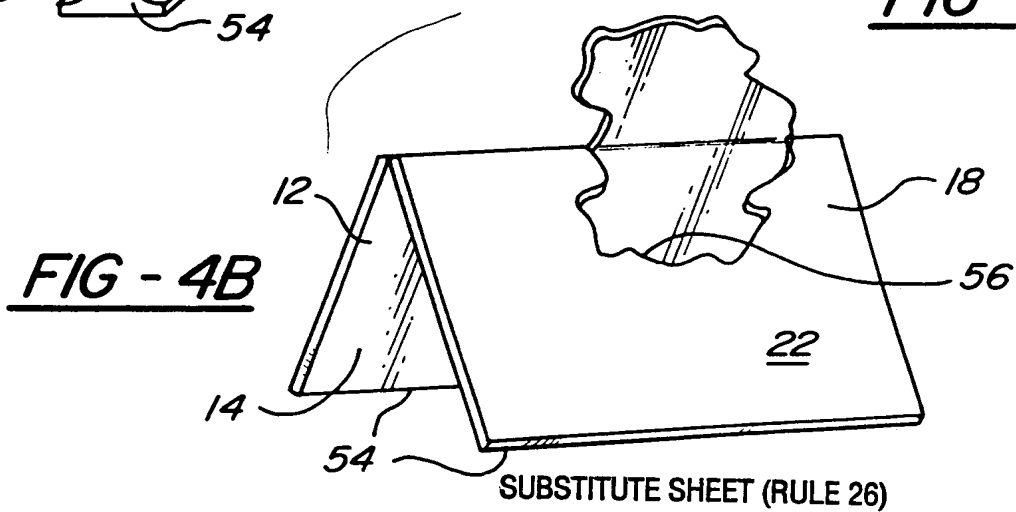
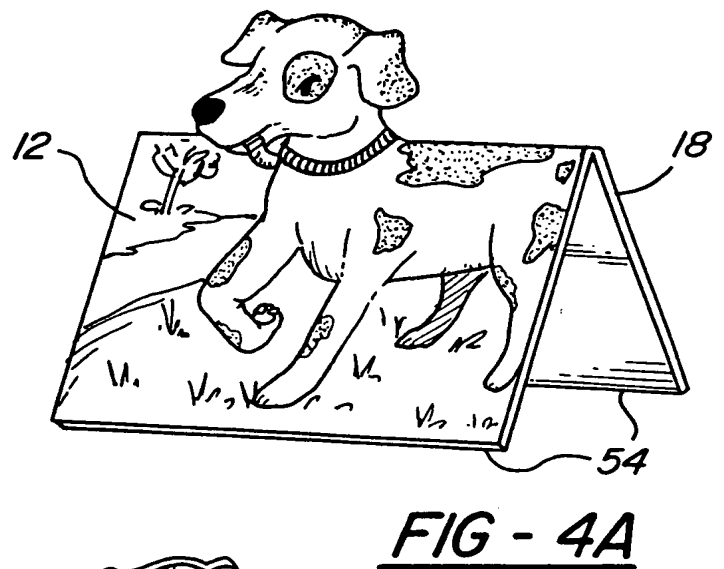
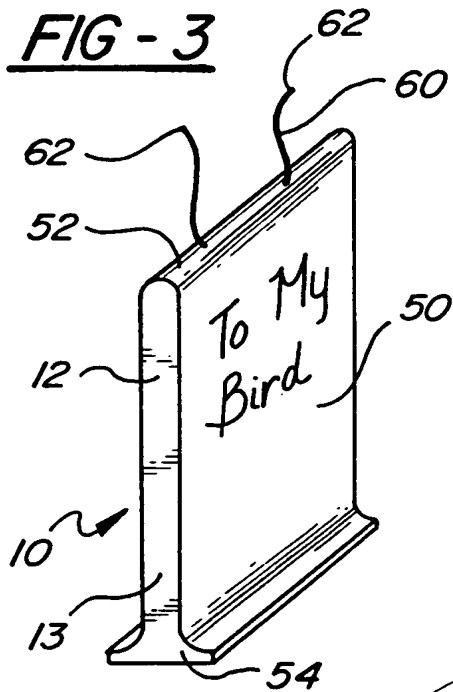
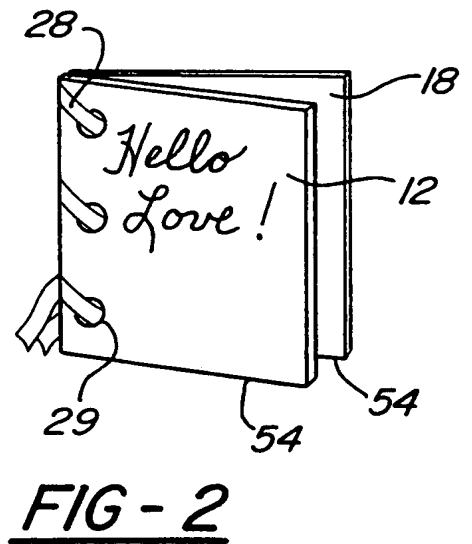
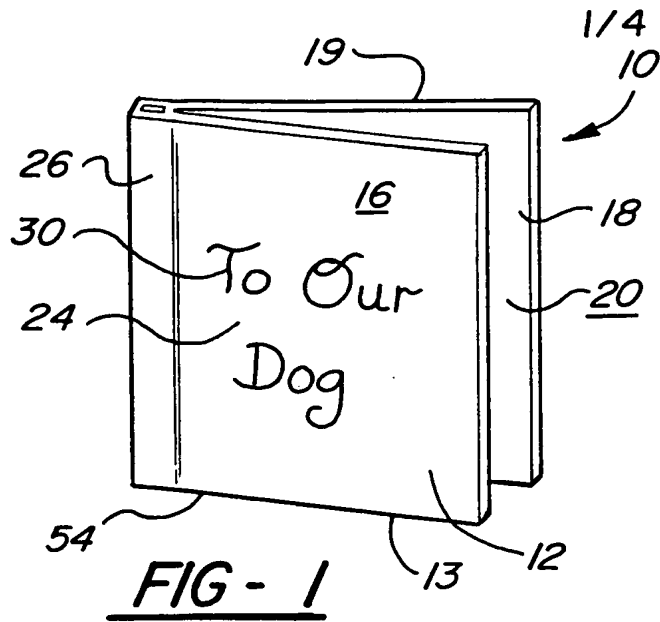
8 at least one edible message suitable for ingestion by the pet, the edible
9 message having a plurality of characters, each character being sufficiently large so
10 as to be perceived visually by humans without assistance; the edible message being
11 positioned within at least one message region on the front surface and/or back
12 surface of at least one substantially rigid edible panel, each message region being
13 configured so as to permit the placement thereupon of at least one edible message;
14 edible joining means suitable for ingestion by the pet for joining one
15 substantially rigid edible panel to at least one other substantially rigid edible panel;
16 and
17 means for positioning the joined substantially rigid edible panels in the
18 vicinity of the pet so that the pet may ingest the substantially rigid edible panels and
19 edible message;
20 whereby at least one edible message is visible from the point of view of the
21 pet.

1 19. The edible greeting card of claim 18, wherein at least two
2 substantially rigid edible panels further include a plurality of holes for joining, the
3 edible joining means comprising a flexible rawhide strip threaded through the holes
4 of the substantially rigid edible panels.

1 20. The edible greeting card as claimed in claim 18, wherein the means
2 for positioning the substantially rigid edible panel in the vicinity of the pet
3 comprises at least one supporting section positioned along and attached to the

1 26. The edible greeting card as claimed in claim 18, wherein the
2 substantially rigid edible panel includes catnip.

1 27. The edible greeting card as claimed in claim 18, wherein the
2 substantially rigid edible panel includes corn.



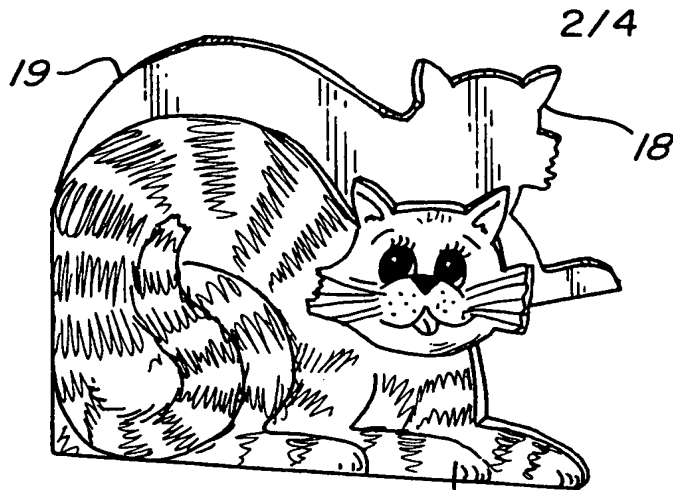


FIG - 5A

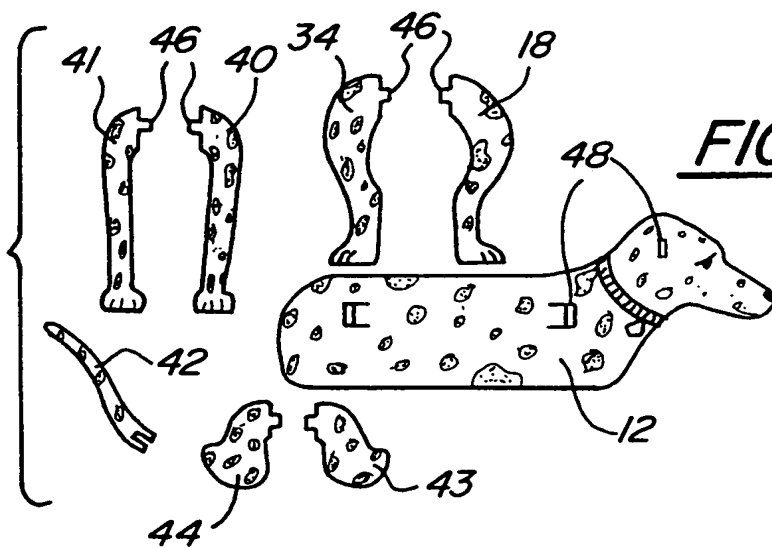
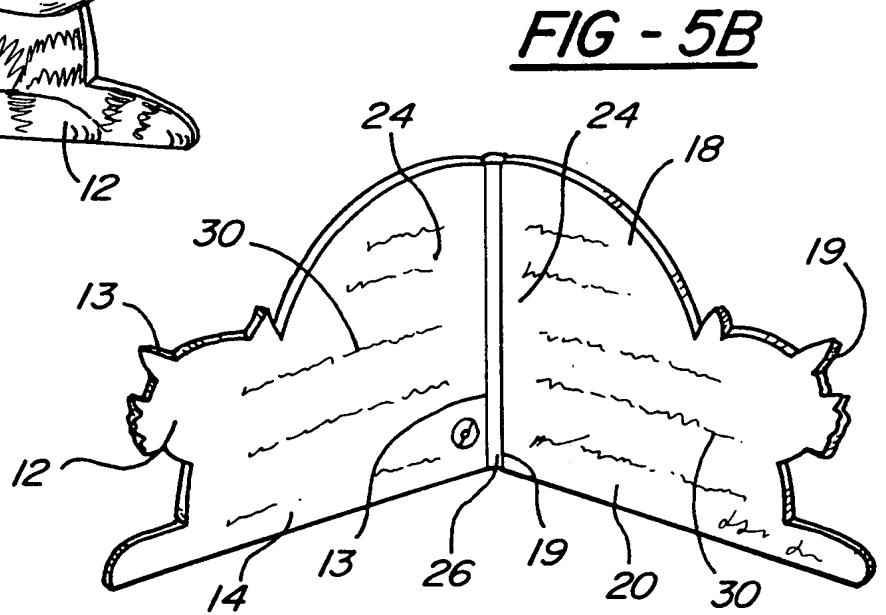
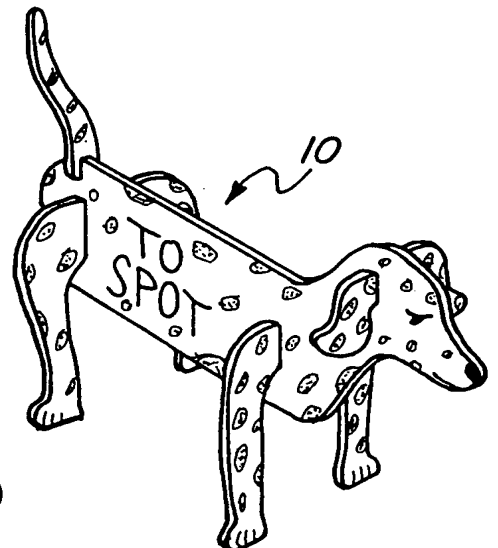


FIG - 6A

FIG - 6B



3/4

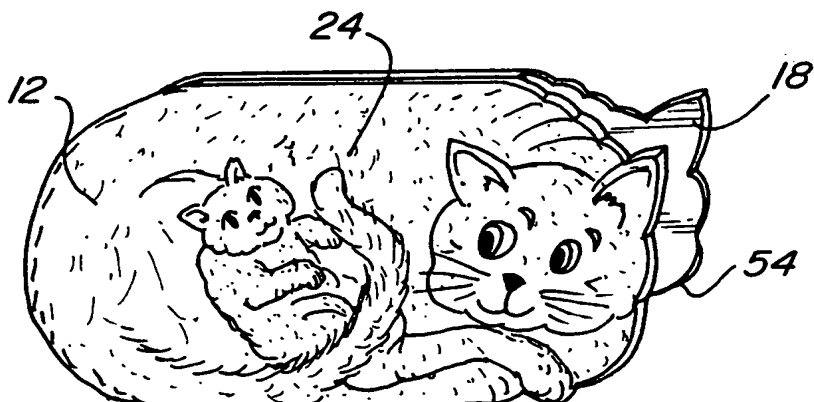


FIG - 7A

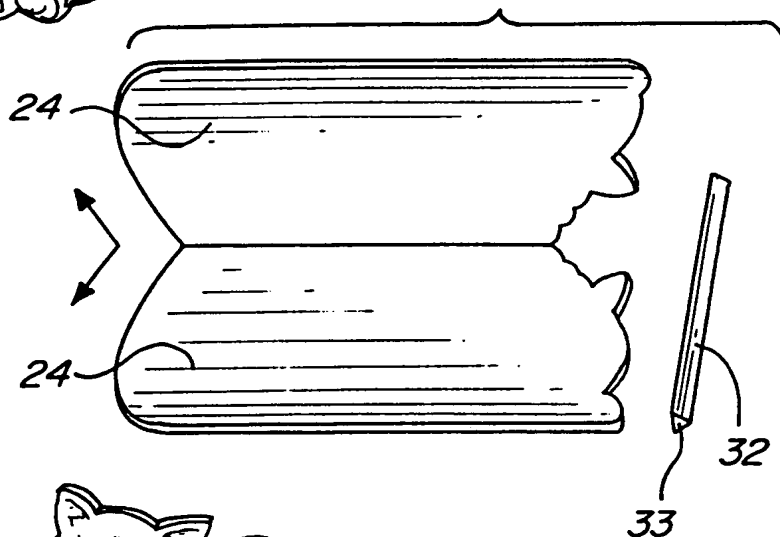


FIG - 8

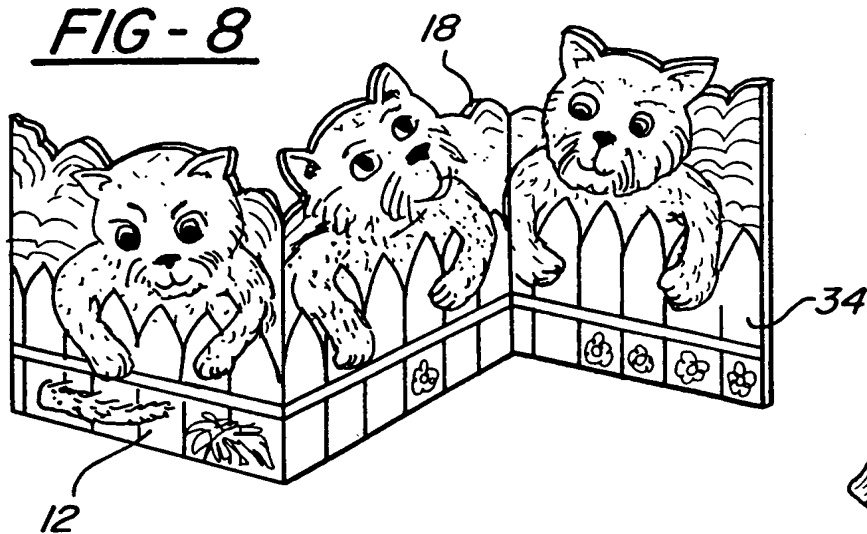
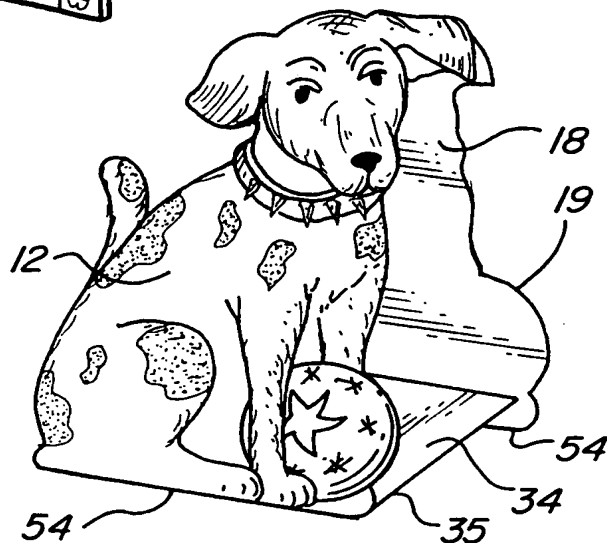


FIG - 9



4/4

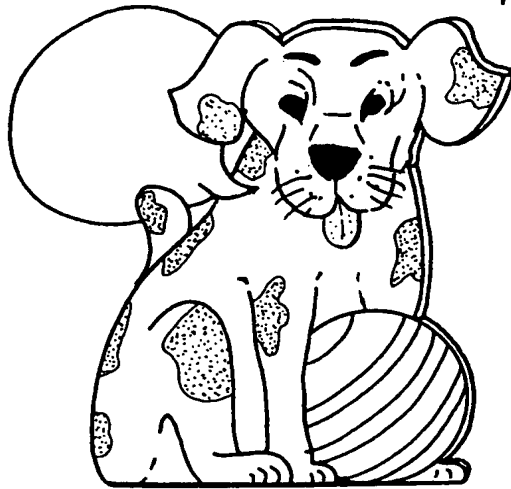


FIG - 10A

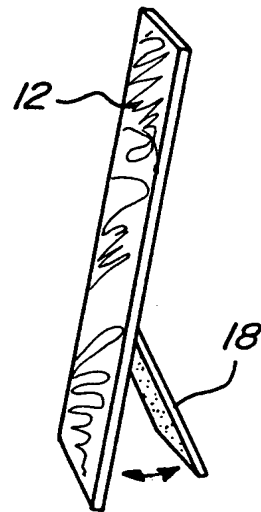


FIG - 10B

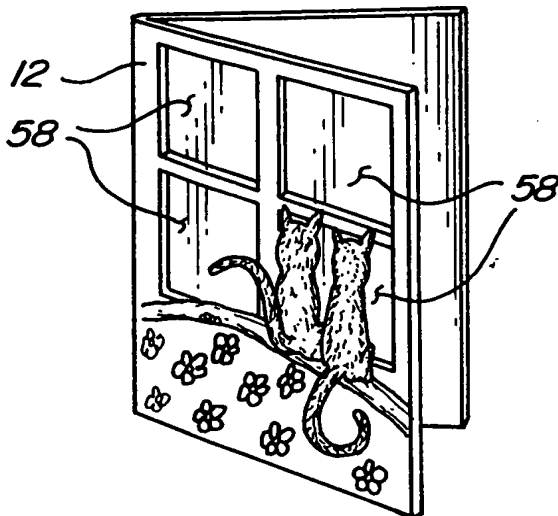


FIG - 11A

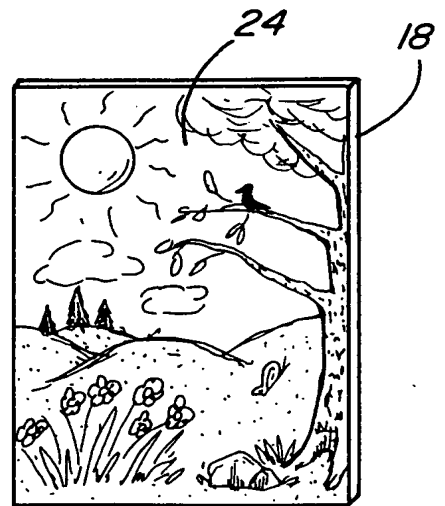


FIG - 11B

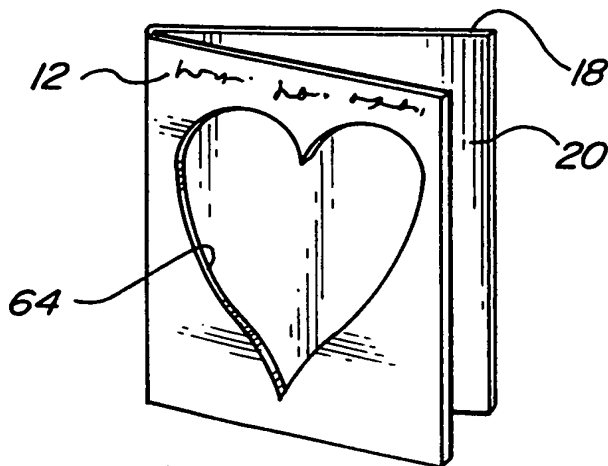


FIG - 12A

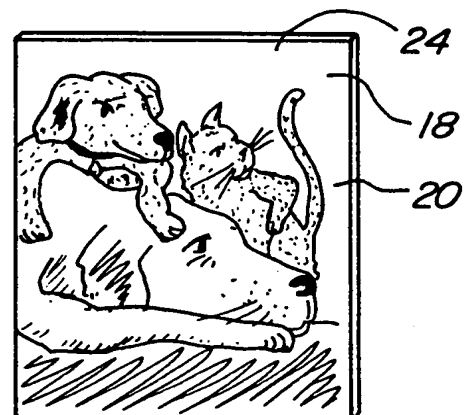


FIG - 12B

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US96/13070

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US, A, 1,791,175 (TOMLINSON) 03 FEBRUARY 1931, See Figures 1-4.	3
Y	US, A, 5,346,710 (GEITNER) 13 SEPTEMBER 1994, See entire document.	1-27
Y	US, A, 919,736 (LOESCH) 27 APRIL 1909, See entire document.	24
A	DE, A, 4,010,003 (WIEBRECHT, B. ET AL) 02 OCTOBER 1991, See element 7.	-
A	US, A, 4,943,063 (MOREAU) 24 JULY 1990, See Figures 1-5.	-
A	US, A, 4,437,432 (IMMEYER ET AL) 20 MARCH 1984, See entire document.	-

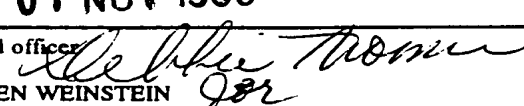
INTERNATIONAL SEARCH REPORT

International application No.
PCT/US96/13070

A. CLASSIFICATION OF SUBJECT MATTER IPC(6) : A23K 1/00 US CL : 426/87, 104, 132, 383 According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S. : 426/87, 104, 132, 383 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched none Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) none		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US, A, 4,668,521 (NEWSTEDER) 26 MAY 1987, See entire document.	1-27
Y	SWISS COLONY CHRISTMAS GIFT BOOK, 1982, Pages B32, 143, 140, B34.	1-27
Y	US, A, 4,560,562 (SCHROEDER) 24 DECEMBER 1985, See entire document.	1-27
Y	US, A, 4,203,516 (STONOGA ET AL) 20 MAY 1980, See entire document.	1-27
Y	DE, A, 2,834,647 (GIESSLER H. J.) 21 FEBRUARY 1980, See entire document.	1-27
Y	DE, A, 2,703,900 (GEBR) 03 AUGUST 1978, See Figures 1 and 2.	1-27
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
*	Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art *&* document member of the same patent family
A	document defining the general state of the art which is not considered to be of particular relevance	
E	earlier document published on or after the international filing date	
L	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	
O	document referring to an oral disclosure, use, exhibition or other means	
P	document published prior to the international filing date but later than the priority date claimed	
Date of the actual completion of the international search 23 OCTOBER 1996		Date of mailing of the international search report 07 NOV 1996
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230		Authorized officer: <i>Steven Weinstein</i> STEVEN WEINSTEIN Telephone No. (703) 308-0650

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US96/13070

A. CLASSIFICATION OF SUBJECT MATTER IPC(6) :A23K 1/00 US CL :426/87, 104, 132, 383 According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S. : 426/87, 104, 132, 383 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched none Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) none		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US, A, 4,668,521 (NEWSTEDER) 26 MAY 1987, See entire document.	1-27
Y	SWISS COLONY CHRISTMAS GIFT BOOK, 1982, Pages B32, 143, 140, B34.	1-27
Y	US, A, 4,560,562 (SCHROEDER) 24 DECEMBER 1985, See entire document.	1-27
Y	US, A, 4,203,516 (STONOGA ET AL) 20 MAY 1980, See entire document.	1-27
Y	DE, A, 2,834,647 (GIESSLER H. J.) 21 FEBRUARY 1980, See entire document.	1-27
Y	DE, A, 2,703,900 (GEBR) 03 AUGUST 1978, See Figures 1 and 2.	1-27
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
*	Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family
"A"	document defining the general state of the art which is not considered to be of particular relevance	
"E"	earlier document published on or after the international filing date	
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	
"O"	document referring to an oral disclosure, use, exhibition or other means	
"P"	document published prior to the international filing date but later than the priority date claimed	
Date of the actual completion of the international search 23 OCTOBER 1996		Date of mailing of the international search report 07 NOV 1996
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230		Authorized officer  STEVEN WEINSTEIN Telephone No. (703) 308-0650

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US96/13070

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US, A, 1,791,175 (TOMLINSON) 03 FEBRUARY 1931, See Figures 1-4.	3
Y	US, A, 5,346,710 (GEITNER) 13 SEPTEMBER 1994, See entire document.	1-27
Y	US, A, 919,736 (LOESCH) 27 APRIL 1909, See entire document.	24
A	DE, A, 4,010,003 (WIEBRECHT, B. ET AL) 02 OCTOBER 1991, See element 7.	-
A	US, A, 4,943,063 (MOREAU) 24 JULY 1990, See Figures 1-5.	-
A	US, A, 4,437,432 (IMMEYER ET AL) 20 MARCH 1984, See entire document.	-

PATENT COOPERATION TREATY

PCT

COMMUNICATION OF
INTERNATIONAL APPLICATIONS

(PCT Article 20)

From the INTERNATIONAL BUREAU

To:

United States Patent and Trademark
Office
(Box PCT)
Crystal Plaza 2
Washington, DC 20231
ETATS-UNIS D'AMERIQUE

Date of mailing:

20 March 1997 (20.03.97)

in its capacity as designated Office

The International Bureau transmits herewith copies of the international applications having the following international application numbers and international publication numbers:

International application no.:

PCT/US96/13070

International publication no.:

WO97/05786

**CORRECTED VERSION
VERSION CORRIGEE**

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No.: (41-22) 740.14.35

Authorized officer:

J. Zahra
Telephone No.: (41-22) 730.91.11

PATENT COOPERATION TREATY

PCT

NOTIFICATION CONCERNING
AMENDMENTS OF THE CLAIMS(PCT Rule 62 and
Administrative Instructions, Section 417)

From the INTERNATIONAL BUREAU

To:

United States Patent and Trademark
Office
(Box PCT)
Crystal Plaza 2
Washington, DC 20231
ETATS-UNIS D'AMERIQUE

in its capacity as International Preliminary Examining Authority

Date of mailing:

08 April 1997 (08.04.97)

International application No.:

PCT/US96/13070

International filing date:

06 August 1996 (06.08.96)

Applicant:

HOY, Stephen, B.

The International Bureau hereby informs the International Preliminary Examining Authority that no amendments under Article 19 have been received by the International Bureau (Administrative Instructions, Section 417)

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No.: (41-22) 740.14.35

Authorised officer:

B. Fitzgerald

Telephone No.: (41-22) 730.91.11

73 Rec'd PC

16 DEC 1997

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

REC'D 30 OCT 1997

WIPO

PCT

RECEIVED
SEP 29 1997
GPO

Applicant's or agent's file reference HOY - 00152/03	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US96/13070	International filing date (day/month/year) 06 AUGUST 1996	Priority date (day/month/year) 07 AUGUST 1995
International Patent Classification (IPC) or national classification and IPC IPC(6): A23K 1/00 and US Cl.: 426/87, 104, 132, 383		
Applicant HOY, STEPHEN B.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 4 sheets.
☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority. (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 2 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of report with regard to novelty, inventive step or industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 14 FEBRUARY 1997	Date of completion of this report 12 SEPTEMBER 1997
Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer <i>Steven L. Weinstein</i> STEVEN L. WEINSTEIN Telephone No. (703) 308-0650

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US96/13070

I. Basis of the report

1. This report has been drawn on the basis of *(Substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments):*

- ☒ the international application as originally filed.
- ☒ the description, pages 1-15 , as originally filed.
pages NONE , filed with the demand.
pages NONE , filed with the letter of _____.
pages _____ , filed with the letter of _____.
- ☒ the claims, Nos. 1-27 , as originally filed.
Nos. NONE , as amended under Article 19.
Nos. NONE , filed with the demand.
Nos. NONE , filed with the letter of _____.
Nos. _____ , filed with the letter of _____.
- ☒ the drawings, sheets/fig 1-4 , as originally filed.
sheets/fig NONE , filed with the demand.
sheets/fig NONE , filed with the letter of _____.
sheets/fig _____ , filed with the letter of _____.

2. The amendments have resulted in the cancellation of:

- ☒ the description, pages NONE .
- ☒ the claims, Nos. NONE .
- ☒ the drawings, sheets/fig NONE .

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the ~~Supplemental Box~~ Additional observations below (Rule 70.2(c)).

4. Additional observations, if necessary:

NONE

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US96/13070

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. STATEMENT**

Novelty (N)	Claims <u>1-27</u>	YES
	Claims <u>NONE</u>	NO
Inventive Step (IS)	Claims <u>NONE</u>	YES
	Claims <u>1-27</u>	NO
Industrial Applicability (IA)	Claims <u>1-27</u>	YES
	Claims <u>NONE</u>	NO

2. CITATIONS AND EXPLANATIONS

Claims 1, 2, 4-13, 15-23 and 25-27 lack an inventive step under PCT Article 33(3) in view of Newsteder and the Swiss Colony Christmas Gift Book, further in view of Schroeder, Stonoga et al, Giessler H.J., Gebr Hack Feinbackw (DE, A 2,703,900) and Geitner. As evidenced by Newsteder and Swiss colony Christmas Gift Book, it was well known to provide a greeting card made from an edible material and having an edible message. The particular living creature the edible card is directed to, human or pet, is not seen to provide an inventive step. The particular edible material is a function of the targeted recipient of the card and not an inventive step. Stonoga et al can be relied on as further evidence of directing a greeting card to a pet. Stonoga et al also discloses conventional greeting card structure. Geissler can be relied on as further evidence of providing edible rigid panels with edible indicia which can be attached to from a book-like or card-like arrangement. Schroeder can be relied on as further evidence of edible greeting cards with edible indicia. Gebr. Hack Feinbackw can be relied on as further evidenced of providing edible panels and the fact that it was known to provide means to support such panels. Finally, Geitner can be relied on as further evidence to show pet food shaped to form a real life object. In regard to dependent claims 5-10, the particular ingredients of the edible panel lacks an inventive step because the ingredients recited are all conventional edible ingredients. In regard to claim 13, Claim 13 lacks an inventive step since Schroeder teaches providing a marker to create an edible message. Claim 18 lacks an inventive step since Geissler teaches it was known to attach two edible panels together with edible joining means. In regard to claim 19, to employ a hole/strip assembly to secure panels together is the traditional way to secure panels together before the advent of the coiled metal bound memo pad. The remainder of the claims, for example, claims 16 and 17, contain duplicate recitations to claims already discussed above.

Claims 3, 14 and 16 lack an inventive step under PCT Article 33(3) in view of the references cited above against claims 1, 2, 4-13, 15-23 and 25-27 and further in view of Tomlinson. Claims 3, 14 and 16 lack an inventive step because as evidenced by Tomlinson, it was conventional to enclose a wire in a pet food so (Continued on Supplemental Sheet.)

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US96/13070

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

~~Sheet 10~~

V. 2. REASONED STATEMENTS - CITATIONS AND EXPLANATIONS (Continued):
that the wire may be secured to a rigid projecting member (for example, a cage).

Claim 24 lacks an inventive step under PCT Article 33(3) in view of the references cited above against claims 1, 2, 4-13 15-23 and 25-27 and further in view of Loesch. Claim 24 lacks an inventive step because as evidenced by Loesch, it was conventional to position an edible message on an edible film and place the edible film on the message region of an edible.

Claims 1-27 meet novelty under PCT Article 33(2) since no reference anticipates an edible greeting card for ingestion by a pet and whose message is a greeting to a pet.

Claims 1-27 meet industrial applicability under PCT Article 33(4) since the claimed product is edible and functions as a greeting card.

----- NEW CITATIONS -----

NONE